

## CLAIM AMENDMENTS

1. (Original) A downhole connector assembly for sealingly attaching a first and a second segment of a control line having a communication line therein, comprising:  
at least one weld coupling; and  
at least one thermal insulator, said thermal insulator located between the communication line and the weld coupling.

2.-27. (Cancelled)

28. (New) An apparatus comprising:  
a weld coupling adapted to be welded to an outer housing of a first cable segment to couple the first cable segment to a second cable segment; and  
a thermal insulator adapted to prevent thermal damage to a communication line of the first cable segment when the weld coupling is welded to the outer housing.

29. (New) The apparatus of claim 28, wherein the thermal insulator contacts the outer housing and contacts the communication line.

30. (New) The apparatus of claim 28, further comprising:  
an insulating material separate from the thermal insulator and located between the outer housing and the communication line to protect the communication line, the insulating material being displaced by the thermal insulator near the weld coupling to prevent thermal damage to the insulating material when the weld coupling is welded to the outer housing.

32. (New) The apparatus of claim 30, wherein the insulating material contacts the outer housing and the communication line, and the thermal insulator contacts the outer housing and the communication line.

32. (New) The apparatus of claim 30, wherein the insulating material comprises a polymeric material.

33. (New) The apparatus of claim 30, wherein the insulating material transverses an axial length of the first cable segment except where the insulating material is displaced by the thermal insulator.

34. (New) The apparatus of claim 30, wherein the thermal insulator is adapted to prevent at least one of melting and outgasing of the insulating material.

35. (New) The apparatus of claim 30, wherein the thermal insulator is located closer to the weld than to the insulating material.

36. (New) The apparatus of claim 28, wherein the weld coupling comprises a sleeve approximately centered where the communication line contacts another communication line of the second cable segment.

37. (New) The apparatus of claim 28, further comprising:  
another thermal insulator separate from the first thermal insulator and adapted to prevent thermal damage to a communication line of the second cable segment.

38. (New) A method comprising:  
providing a weld coupling adapted to be welded to a first cable segment to a second cable segment to coupled the first and second cable segments together; and  
preventing thermal damage to a communication line of the first cable segment when the weld coupling is welded to the first cable segment.

39. (New) The method of claim 38, wherein the preventing comprises:  
providing a thermal insulator between an outer housing of the first cable segment and the communication line.

40. (New) The method of claim 39, wherein the thermal insulator contacts the outer housing and the communication line.

41. (New) The method of claim 39, wherein the outer housing is adapted to be welded to the weld coupling.

42. (New) The method of claim 38, further comprising:  
preventing damage to a polymeric material that surrounds the communication line when the weld coupling is welded to the outer housing of the first cable segment.

43. (New) The method of claim 42, further comprising:  
displacing the polymeric material near the weld coupling with another material to prevent thermal damage to the polymeric material.

44. (New) The method of claim 38, wherein the preventing comprises:  
preventing thermal damage to the communication line during the formation of a metal weld between the weld coupling and the outer housing of the first cable segment.

45. (New) The method of claim 38, further comprising:  
preventing thermal damage to a communication line of the second cable segment when the weld coupling is welded to the second cable segment.

46. (New) The method of claim 45, wherein the preventing of thermal damage to the communication line of the first cable segment and the preventing of thermal damage to the communication line of the second cable segment comprises:

using separate thermal insulators to protect the communication lines of the first and second segments.